



ANTENNA EXPERTS

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Model # TLP-312 225 – 400 MHz. 12 dBi Gain

Tactical Radio Relay Log Periodic Antenna NATO Band 1

DESIGN FEATURES: The TLP-312 tactical log periodic radio relay antenna uses 6063T6 ultra corrosion resistant architectural aluminum alloy. The TLP-312 log periodic dipole antenna is designed to provide wideband directional radio signals from 225 to 400 MHz frequency band. The tactical radio relay antenna covers full NATO band I, operates in linear polarization and requires only one operator for installation. The mounting bracket is welded at the back end of the dual booms of log periodic antenna which permits to change the polarization from horizontal to vertical and vice-versa. The coaxial cable sealed inside the support boom to make it weatherproof. The antenna is highly suitable for use in all tactical and fixed station applications for conventional radio relay systems.

CONSTRUCTIONS: The TLP-312 assembled log periodic antennas outer-most dimensions are 1.1 meters (3.5 feet) long and 0.7 meters (2.3 feet) wide. The antenna has foldable elements, the longest of which is 0.35 meter. All elements are supplied in two segments for easy of shipping and handling. The elements are attached via a fast deployment self-locking device at points along the boom. The extra spacers are used between the support booms to improve mechanical durability of antenna. The log periodic antenna operates at D.C. ground with low resistance discharge path for protection against lightning and immunity to noise. All the screws, nuts and bolts of log periodic dipole antenna are made of type 316 marine grade stainless steel. The antenna supplied with olive green epoxy based anti-corrosive paint.



ELECTRICAL SPECIFICATIONS:

Frequency Range	225 - 400 MHz.
Gain	12 dBi.
Bandwidth	Entire NATO Band I
Polarization	Vertical or Horizontal
Input Impedance	50 Ohms
Radiation Pattern	Directional
Beam-width –Half Power Points	60 Degrees
Front to Back Ratio	16 dB.
VSWR – Equal to or Better Than	2:1
RF Power Handling Capacity	500 Watts
Input Termination	N-Female
Lightning Protection	Direct Ground

MECHANICAL SPECIFICATIONS:

Antenna Materials	6063T6 Aluminum Alloy
Mounting Hardware	Marine Grade Stainless Steel
Gross Weight	4 Kgs.
Wind Rating	200 Km/Hr.
Overall Length	1.1 Meters
Shipping Length	1.2 Meters
Support Boom -Cross Section –Outer diameter	Aluminum-Square Tube-25.4mm
Elements -Cross Section –Outer diameter	Aluminum-Round Tube-19 - 12mm
Insulator Material	Teflon & Nylon
Maximum Mount Pipe Diameter	52 mm (2 Inches)

ENVIRONMENTAL SPECIFICATIONS:

Operating Temperature	(-) 30 to +75 Degrees Celsius
Storage Temperature	(-) 40 to +85 Degrees Celsius
Humidity	0 to 95% RH

Note: All information contained in the datasheet is subject to change without any prior notice.